ВЕНТИЛЯТОРЫ.RU zakaz@ventilatorry.ru
МАГАЗИН ПРОМЫШЛЕННЫХ ВЕНТИЛЯТОРОВ

**S3G450-AO02-30**

# EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

**ebm-papst Mulfingen GmbH & Co. KG**
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ErP2015 EXCEEDS THE NORM

## Nominal data

| | |
|---|---|
| **Type** | **S3G450-AO02-30** |
| **Motor** | **M3G074-DF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Nominal voltage range | VAC | 200 .. 240 |
| Frequency | Hz | 50/60 |
| Type of data definition | | ml |
| Speed | $min^{-1}$ | 980 |
| Power input | W | 163 |
| Current draw | A | 1.34 |
| Max. back pressure | Pa | 74 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | +60 |

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

## Data according to ErP directive

| | |
|---|---|
| Installation category | A |
| Efficiency category | Static |
| Variable speed drive | Yes |
| Specific ratio* | 1.00 |

* Specific ratio = 1 + $p_{fs}$ / 100 000 Pa

| | | Actual | Request 2013 | Request 2015 |
|---|---|---|---|---|
| Overall efficiency $\eta_{es}$ | | 39.8 | 24.6 | 28.6 |
| Efficiency grade N | | 51.2 | 36 | 40 |
| Power input $P_{ed}$ | kW | 0.16 | | |
| Air flow $q_v$ | $m^3/h$ | 3505 | | |
| Pressure increase $p_{fs}$ | Pa | 61 | | |
| Speed n | $min^{-1}$ | 1000 | | |

Data established at point of optimum efficiency

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## Technical features

| | |
|---|---|
| **Size** | 450 mm |
| **Material of blades** | PP-GF40 plastic |
| **Material of guard grille** | Steel, phosphated and coated in black plastic |
| **Number of blades** | 5 |
| **Direction of air flow** | "V" |
| **Direction of rotation** | Counter-clockwise, seen on rotor |
| **Type of protection** | IP 54 |
| **Insulation class** | "B" |
| **Humidity class** | F3-1 |
| **Max. permissible ambient motor temp. (transp./ storage)** | + 80 °C |
| **Min. permissible ambient motor temp. (transp./storage)** | - 40 °C |
| **Mounting position** | Any |
| **Condensate discharge holes** | None, open rotor |
| **Cooling bore / aperture** | Rotor-side |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Motor current limit<br>- Soft start<br>- Over-temperature protected electronics / motor |
| **Speed steps** | 2 |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | <= 3.5 mA |
| **Motor protection** | PTC resistor |
| **Cable exit** | Variable |
| **Protection class** | I (if protective earth is connected by customer) |

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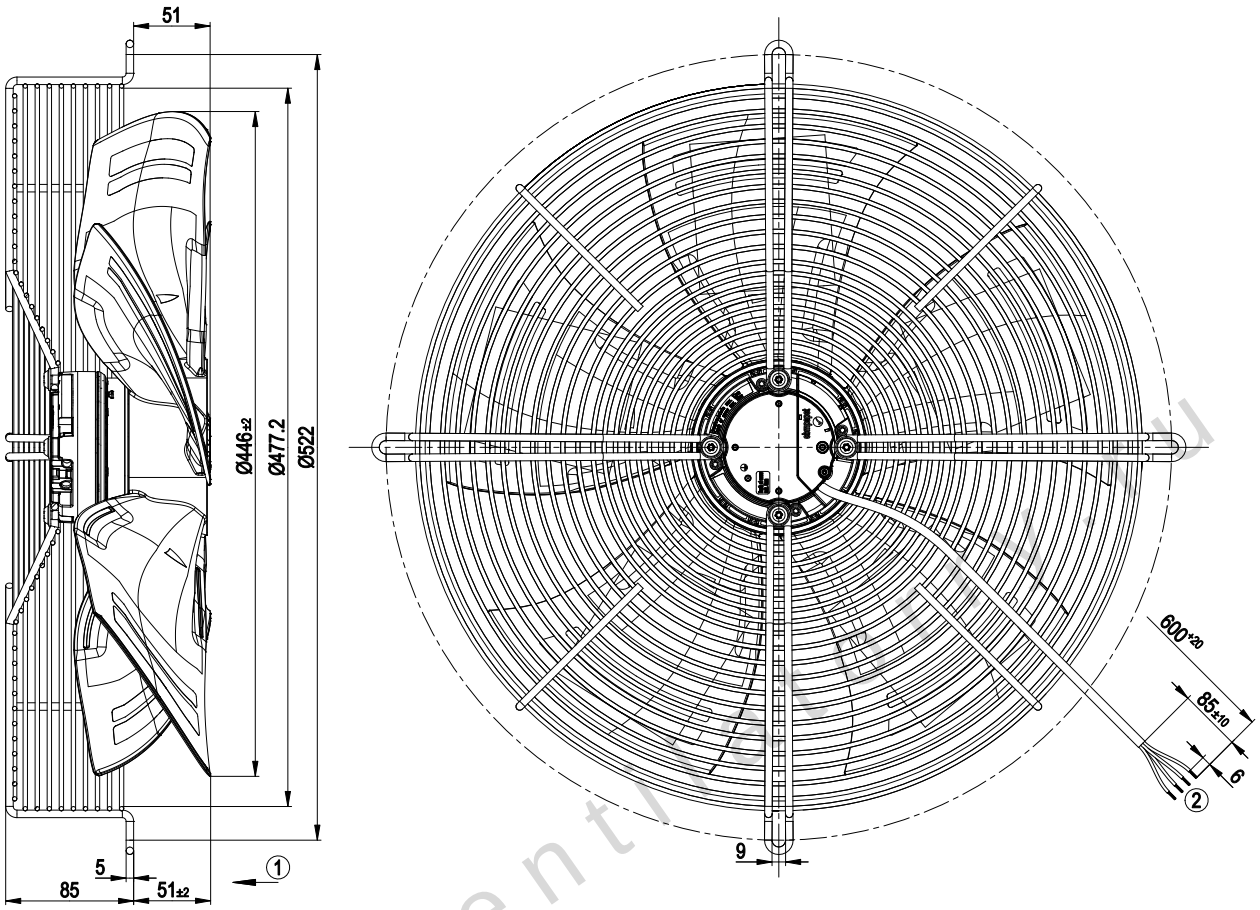
## Product drawing




| | |
|---|---|
| 1 | Direction of air flow "V" |
| 2 | Connection line PVC 4G AWG20, 4x brass lead tips crimped |

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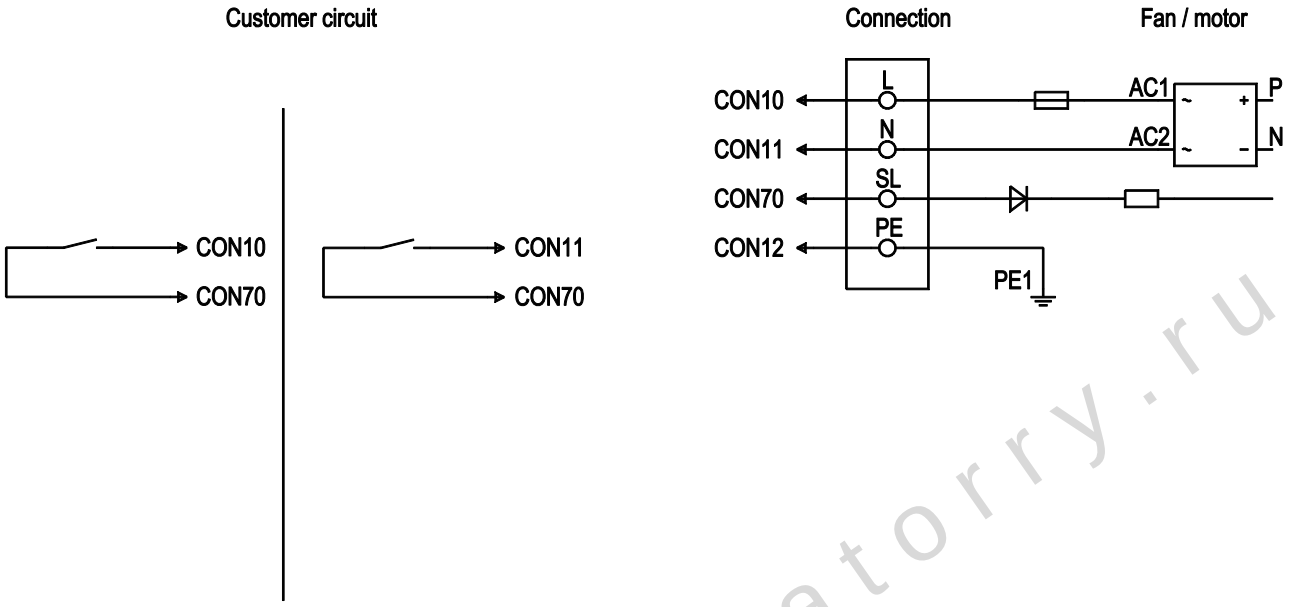
## Connection screen




| Line | No. | Signal | Colour | Function / assignment |
|---|---|---|---|---|
| | CON 10 | L | black | Power supply 230 VAC, 50 - 60 Hz, see type plate for voltage range |
| | CON 11 | N | blue | Neutral conductor |
| | CON 12 | PE | green/yellow | Protective earth |
| | CON 70 | SL | brown | Speed selection: switch open = speed 1; switch closed = speed 2 |

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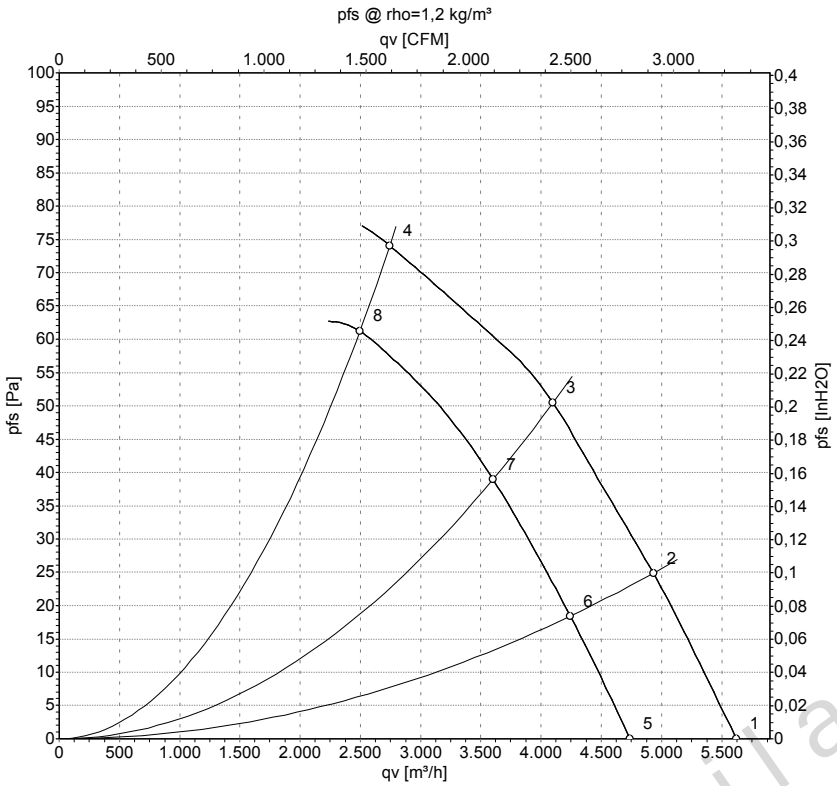
## Charts: Air flow 50 Hz




Measurement: LU-138244
Measurement: LU-138246

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

| | U | f | n | $P_{ed}$ | I | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|
| | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 230 | 50 | 1110 | 163 | 1.34 | 5620 | 0 |
| 2 | 230 | 50 | 1065 | 163 | 1.34 | 4930 | 25 |
| 3 | 230 | 50 | 1030 | 163 | 1.34 | 4100 | 50 |
| 4 | 230 | 50 | 980 | 163 | 1.34 | 2745 | 74 |
| 5 | 230 | 50 | 935 | 100 | 0.86 | 4740 | 0 |
| 6 | 230 | 50 | 920 | 108 | 0.92 | 4245 | 18 |
| 7 | 230 | 50 | 905 | 115 | 0.97 | 3600 | 39 |
| 8 | 230 | 50 | 885 | 124 | 1.05 | 2495 | 61 |

U = Supply voltage · f = Frequency · n = Speed · $P_{ed}$ = Power input · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase

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